

- a) hybridizing a detector primer and a second primer to the target such that extension of the second primer by polymerase displaces the detector primer from the target sequence, wherein the detector primer comprises a diagnostic nucleotide for the single nucleotide polymorphism which is a 3' terminal nucleotide of the detector primer or about one to four nucleotides from the 3' terminal nucleotide of the detection primer;
- b) extending the detector primer and the second primer with polymerase to produce a displaced detector primer extension product;
- c) determining an efficiency of detector primer extension; and
- d) detecting the presence or absence of the single nucleotide polymorphism based on the efficiency of detector primer extension.

14 (Amended) The method of Claim 13 wherein the amplification reaction is selected from the group consisting of SDA, 3SR, NASBA, and TMA.

20. (Amended) The method of Claim 19 wherein the label is a fluorescent donor/quencher dye pair and an increase in donor dye fluorescence is detected as an indication of the presence of the single nucleotide polymorphism.

Please add the following new Claim 63.

63. (New) A method for detecting a single nucleotide polymorphism in a target comprising:

- a) hybridizing a detector primer and a second primer to the target such that extension of the second primer by polymerase displaces the detector primer from the target sequence, wherein the detector primer comprises a diagnostic nucleotide for the single nucleotide polymorphism which is about two to four nucleotides from the 3' terminal nucleotide of the detection primer;
- b) extending the detector primer and the second primer with polymerase to produce a displaced detector primer extension product;
- c) determining an efficiency of detector primer extension, and;
- d) detecting the presence or absence of the single nucleotide polymorphism based on the efficiency of detector primer extension.